



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Nishnabotna River

Water Body ID: 0227

Water Body Segment at a Glance:

County: Atchison
Nearby City: Watson
Length: 10.2 miles
Pollutants: *Escherichia coli* (*E. coli*)
Source: Rural nonpoint sources



State Map Showing Location of Watershed

Schedule for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. The Nishnabotna River is impaired due to exceedances of state water quality criteria that protect the whole body contact recreation designated use.

Designated uses of Nishnabotna River*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)
- Drinking Water Supply

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated uses that are impaired

- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

- Numeric bacteria criteria for the protection of recreational uses is found in 10 CSR 20-7.031(5)(C) and Table A. For category B waters, *E. coli* counts, measured as a geometric mean, shall not exceed 206 counts/100 mL of water “during the recreational season.” The state’s recreational season is defined in this section of the rule as being from April 1 to October 31.

Assessment and water quality data

A stream is judged to be impaired for bacteria if the recreational season geometric mean is exceeded in any of the last three years for which adequate data (5 samples) is available. For the Nishnabotna River, there was adequate bacteria data in 2011. The recreational season geometric mean for *E. coli* measurements from the Nishnabotna River is 328 counts/100 mL, which is greater than the whole body contact recreation category B criterion.

TMDL for Nishnabotna River

The Nishnabotna River TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Nishnabotna River TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

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Map of the Nishnabotna River Watershed

